

Amendments to the Claims:

Please cancel claims 1-30 without prejudice to continued prosecution. Please add new claims 31-67 as follows. The claims and their status are shown below.

1-30. (Canceled)

31. (New) A method for improved purification of a first substance bound to paramagnetic microparticles, wherein the microparticles are suspended in a first liquid, the method comprising the following steps:

a) exposing the microparticles to a first magnetic field in a first container to thereby capture the microparticles and prevent the microparticles from being washed away with the first liquid, wherein the first container is in fluid communication with at least a first line, and

b) passing at least part of the first liquid in a first direction through a portion of the first line and exposing the at least part of the first liquid to a second magnetic field or to the first magnetic field in the portion of the first line such that microparticles not captured in the first container are captured, wherein the cross-sectional area of the portion of the first line is enlarged, wherein the first or second magnetic field in the portion of the first line has a greater average field strength than the first magnetic field in the first container.

32. (New) The method of claim 31, further comprising: discontinuing the first or second magnetic field in the portion of the first line, and passing a second and/or a further liquid through the portion of the first line in a second direction opposite that of the first liquid such that at least some of the microparticles captured in the portion of the line are combined with the microparticles captured in the first container.

33. (New) The method of claim 32, wherein the second liquid is selected such that the first substance remains bound to the microparticles and further substances or other contaminants are detached from the microparticles and/or from the first substance.

34. (New) The method of claim 32, wherein a further liquid is selected such that the first substance is detached from the microparticles.

35. (New) The method of claim 32, wherein the portion of the first line is configured in such a way that when the second and/or further liquid passes in the second direction, turbulence is produced in the portion such that microparticles deposited thereon are disrupted and resuspended in the second and/or further liquid.

36. (New) The method of claim 31, wherein a second line has an opening in the portion of the first line and is configured such that when the second and/or further liquid passes into the portion in the first line, turbulence is produced in the portion of the first line and microparticles deposited thereon are resuspended into the liquid.

37. (New) The method of claim 31, wherein steps a and b are repeated with a second and/or further liquid in place of the first liquid.

38. (New) The method of claim 31, wherein the first magnetic field acts on a region within the first container and the microparticles are exposed to the first magnetic field by a permanent magnet that is brought into contact with the region and the portion of the first line.

39. (New) The method of claim 31, wherein the first magnetic field acts on a region within the first container and the microparticles are exposed to the first and second magnetic fields by permanent magnets that are brought into contact with the region and with the portion of the first line, respectively.

40. (New) The method of claim 31, wherein the microparticles have an average diameter of from 50 nm to 50 μ m.

41. (New) The method of claim 31, wherein the microparticles have an average diameter of from 500 nm to 50 μ m.

42. (New) The method of claim 31, wherein the microparticles have a coating thereon comprising glass, silicate, silane, an ion exchanger, a receptor, a ligand, an antigen, an antibody and/or a nucleic acid.

43. (New) A device for improving the purification of a first substance bound to paramagnetic microparticles, the microparticles being suspended in a first liquid, said device comprising:

- a first container for providing or receiving a first liquid comprising the microparticles,

- a first line in fluid communication with the first container via an opening, and
- a portion of the first line, wherein the portion of the first line has an enlarged cross-sectional area in comparison with the remaining cross-sectional area of the first line,

a first magnet or a first recess for receiving a first magnet, wherein the first magnet or the first recess is positioned to produce a first magnetic field in a region of the first container and/or in the portion of the first line,

optionally, a second magnet or a second recess for receiving a second magnet, wherein the second magnet or the second recess is positioned to produce a second magnetic field in the portion of the first line,

wherein the container, the portion of the first line and the first recess or the first magnet and, if present, the second recess or the second magnet are arranged in such a way that the magnetic field within the portion of the first line has a greater average field strength than the magnetic field within the first container.

44. (New) The device of claim 43, wherein the first and/or second magnet is a permanent magnet.

45. (New) The device of claim 43, wherein the portion of the first line is a recess in the first line.

46. (New) The device of claim 43, wherein the portion of the first line is formed in such a way that when a liquid flows in a first direction, a laminar flow is produced and when a liquid flows in the opposite direction, a turbulent flow is produced.

47. (New) The device of claim 43, further comprising at least one second line branching off from the first line.

48. (New) The device claim 47, wherein the second line comprises an opening that opens into the portion of the first line, wherein the opening is configured in such a way that liquid flows through the opening into the portion of the first line and causes turbulence in the portion of the first line, thereby disrupting microparticles deposited thereon for the purpose of resuspension.

49. (New) The device of claim 43, wherein the first line has a diameter of from 50 μm to 2 mm.

50. (New) The device of claim 43, wherein the first line has a diameter of from 100 μm to 500 μm .

51. (New) The device of claim 43, wherein the portion of the first line has a cross-sectional area that is, at most, three times larger than the cross-sectional area of the first line.

52. (New) The device of claim 43, wherein the portion of the first line has a cross-sectional area that is, at most, two times larger than the cross-sectional area of the first line.

53. (New) The device of claim 43, wherein the portion of the first line has a cross-sectional area of, at most, 2 mm^2 .

54. (New) The device of claim 43, wherein the portion of the first line has a cross-sectional area of, at most, 1 mm^2 .

55. (New) The device of claim 43, further comprising a second container for the provision of a second liquid and, optionally, a further container for the provision of a further liquid and a fourth container for receiving any of the first, second or further liquid(s).

56. (New) The device of claim 55, wherein the second container comprises a second line, wherein the optional further container comprises a further line, wherein the first, second and/or further lines are in fluid communication with the fourth container.

57. (New) The device of claim 55, wherein the first, second, further and/or fourth container comprises a plunger, wherein the plunger(s) are configured to displace liquid from the respective container(s).

58. (New) The device of claim 55, wherein the first, second, further and/or fourth container(s) is/are configured in the form of a replaceable cartridge.

59. (New) The device of claim 55, wherein the first, second, further and/or fourth container are cylindrical.

60. (New) The device of claim 55, wherein the first, second, further and/or fourth container have a maximum volume of from $50 \text{ }\mu\text{l}$ to 50 ml

61. (New) The device of claim 55, wherein the first, second, further and/or fourth container have a maximum volume of from $500 \text{ }\mu\text{l}$ to 5 ml .

62. (New) The device of claim 43, wherein the device is configured to be inserted into a sample processing unit.

63. (New) The device of claim 62, wherein said sample processing unit is an automated sample processing unit.

64. (New) The device of claim 63, wherein the unit has at least one means for displacing the one or more plungers of claim 57.

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65. (New) The device of claim 43, wherein the device is plastic.
66. (New) The device of claim 65, wherein the plastic is polycarbonate.
67. (New) The device of claim 43, wherein the plastic device is produced by means of an injection-molding process.